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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,102	10/15/2003	Edward H. Abraham	DC-0242	7243

7590 02/09/2006
Jane Massey Licata
Licata & Tyrrell P.C.
66 E. Main Street
Marlton, NJ 08053

EXAMINER

PRYOR, ALTON NATHANIEL

ART UNIT PAPER NUMBER

1616

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/687,102	Applicant(s) ABRAHAM, EDWARD H.	
	Examiner Alton N. Pryor	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 28 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's arguments filed 10/28/05 have been fully considered but they are not persuasive. See argument below.

I. Rejection claims 1 and 2 under 35 USC 103(a) as being obvious over Dalton, Rapaport, and Altaba will be maintained for reason on record and reason as follows.

Applicant argues 1) there exist no motivation to combine the references, 2) no reasonable expectation of success resulting from combining the references, 3) the art of record does not demonstrate successful use in patients of bisphosphonate in a combination therapy with any targeting agent or any adenosine agent or an adenosine receptor blocking agent for treatment of cancer of any type, 4) Rapaport does not teach or suggest successful combination therapy of ATP and bisphosphonate and targeting agent as defined in the specification, 5) Altaba administers an agent that blocks adenosine receptors; whereas instant application discloses use of an adenosine diaminase inhibitor, not a receptor blocker, 6) it must be shown that the agents, when combined, have efficacy, without unwanted toxicity.

Examiner responses as follows: Dalton suggests that bisphosphonate enhances the efficacy of chemotherapeutic treatments. Note that Doxorubicin (targeting agent based on specification page 15) is used in chemotherapy. Therefore, Dalton does suggest the combination of bisphosphonate and doxorubicin in cancer treatment. See paragraphs 1,16,21, and claim 4 of Dalton. Applicant admits that Rapaport teaches the use of ATP in cancer treatment. If this were so, it would have been obvious to modify the invention of Dalton to include AMP since both inventions are to cancer treatment. In

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addition, AMP treatment as used in Rapaport functions as a chemotherapeutic agent and Dalton teaches that chemotherapeutic treatment is enhanced by bisphosphonate. Applicant states that instant invention would not invite an agent that block the adenosine receptor as disclosed in Altaba. However, on page 13 of the specification, Applicant states a preferred embodiment includes agents, which block the adenosine receptor. Altaba also teaches the use of deoxycorformycin as a chemotherapeutic agent which applicant employs as an adenosine deaminase inhibitor in instant invention on page 13 of the instant specification. For these reasons, it would have been obvious to invite Altaba to this rejection. Because all the references are geared towards the treatment of cancer, the combination would have been expected to give at least an additive effect if not a synergistic effect (motivation and success). Note that Dalton suggests efficacy from the combination of bisphosphonate and chemotherapeutic treatments suggests that bisphosphonate enhances the efficacy of chemotherapeutic treatments. See paragraphs 1,16,21, and claim 4 of Dalton. Enhancement would not suggest increase toxicity.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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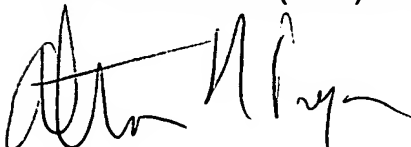
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Telephonic Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alton N. Pryor whose telephone number is 571-272-0621. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Alton Pryor', is written over a horizontal line.

Alton Pryor
Primary Examiner
AU 1616